

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-11. (Canceled)

12. (Currently Amended) An apparatus for providing power to a model vehicle, the apparatus comprising:

a control knob configured to be rotated by a user over a range of positions;

a light source;

a sensing element in communication with the control knob and configured to detect a speed of rotation of the knob over a period of about 50 milliseconds or less, the sensing element comprising an optical detector;

a rotatable disk in communication with the knob and intervening between the light source and the optical detector; and

a processor in electrical communication with the sensing element, the processor configured to correlate knob rotational speed with a magnitude of power provided from a source to a model vehicle by multiplying a distance of rotation of the knob by a factor based upon speed of knob rotation.

13. (Canceled)

14. (Previously Presented) The apparatus of claim 12 wherein the processor is configured to generate the factor proportional to the speed of knob rotation.

15. (Currently Amended) The apparatus of claim 12 ~~wherein the sensing element comprises an optical detector, and the apparatus further comprises:~~

~~a light source; and~~

~~a rotatable disk intervening between the light source and the optical detector, the rotatable disk communication with the knob and including gaps spaced at regular angular~~

increments to allow optical communication between the light source and the detector, wherein the processor is configured to detect knob rotation speed based upon a rate of changed transmission of light.

16. (Original) The apparatus of claim 15 wherein the sensing element further comprises a second optical detector positioned at a different location along a rotational range of the disk, the processor further configured to detect a direction of knob rotation based upon a phase difference between electrical signals produced from the first and second optical detectors.

17. (Currently Amended) The apparatus of claim 12 ~~wherein the sensing element comprises an optical detector, and the apparatus further comprises:~~

~~a light source; and~~

~~a rotatable disk intervening between the light source and the optical detector, the rotatable disk communication with the knob and including reflecting elements spaced at regular angular increments to allow optical communication between the light source and the detector, wherein the processor is configured to detect knob rotation speed based upon a rate of changed reflection of light.~~

18. (Original) The apparatus of claim 17 wherein the sensing element further comprises a second optical detector positioned at a different location along a rotational range of the disk, the processor further configured to detect a direction of knob rotation based upon a phase difference between signals produced from the first and second optical detectors.

19. (Original) The apparatus of claim 12 further comprising an antenna configured to allow the processor to communicate with the power source through a wireless signal.

20. (Original) The apparatus of claim 12 further comprising a wired communication link between the processor and the power source.